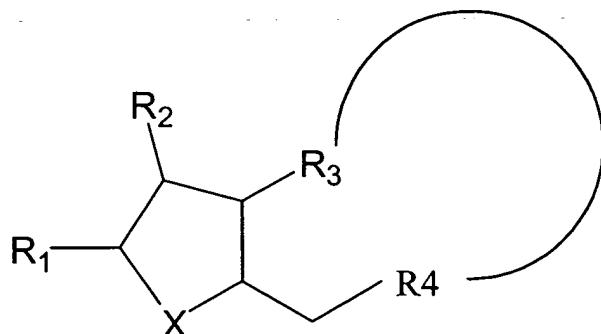


We claim:

1. Furanose-type macrocyclic carbohydrate compounds having the formula



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wherein R₁ is selected from the group consisting of alkyl, aryl, O-aryl, S-aryl, OH, O-alkyl, SH, S-alkyl, NH₂, N₃, halogens, -OOCH, and COOH;

wherein R₂ is selected from the group consisting of H, hydroxyl, aliphatic and aromatic

10 ethers and esters;

wherein R₃ is selected from the group consisting of alkyl, aryl, O-aryl, S-aryl, OH, O-alkyl, SH, S-alkyl, NH₂, N₃, halogens, -OOCH, COOH, and acetal rings;

wherein R₄ is selected from the group consisting of alkyl, aryl, O-aryl, S-aryl, OH, O-alkyl, SH, S-alkyl, NH₂, N₃, halogens, -OOCH, COOH, and acetal rings; and

15 wherein X is selected from the group consisting of O, N and S.

2. A compound as defined in claim 1, wherein R₁ is preferably phenyl; R₂ is preferably selected from the group consisting of -OMe, -OH, and -H; R₃ is preferably selected from the group consisting of -OH, -OAc, -OH, -OBn, and -H; and R₄ is preferably selected from the

20 group consisting of -H, -OAc, and -OBn; or a pharmaceutically active derivative thereof.

3. A compound as defined in claim 1, wherein R₁ and R₂ form a ring and are -OC(CH₃)₂O-.

4. A compound as defined in claim 1, wherein R₃ and R₄ form a ring and are preferably selected from the group consisting of -OSi(i-Pr)₂OSi(i-Pr)₂O- and -OCH(Ph)O-.

5. A method of treating a viral infection in a mammalian subject comprising the step of 5 administering to the subject a composition comprising at least one compound of claim 1.

6. The method of claim 5 wherein the composition contains a compound of claim 1 in an effective anti-viral amount.

10 7. The method of claim 5 wherein the mammalian subject is a human patient or another mammal.

8. A method as defined in claim 3, wherein the viral infection is an infection caused by Cytomegalovirus.